

**WHAT IS CLAIMED IS:**

1. A remote controller capable of transmitting different control signals for controlling an anti-theft device on an automobile, said remote controller comprising:

5       a casing;

          a controller circuit disposed in said casing and including

              a processor unit, and

              a transmitter circuit connected electrically to  
10       and controlled by said processor unit so as to transmit the control signals wirelessly;

          a function key set mounted on said casing and connected electrically to said processor unit, said function key set including

15       a function select key operable so as to control selection of the control signals by said processor unit,

          a first command transmit key operable so as to enable said processor unit to control said transmitter circuit to transmit a currently selected one of the  
20       control signals, and

          a user-programmable second command transmit key capable of being assigned with the currently selected one of the control signals, and operable so as to enable said processor unit to control said transmitter circuit  
25       to transmit an assigned one of the control signals; and

          a function display unit mounted on said casing and connected electrically to said processor unit, said

function display unit being controlled by said processor unit to provide a visual indication corresponding to the currently selected one of the control signals.

2. The remote controller as claimed in Claim 1, wherein  
5 said function display unit includes:

a plurality of lamp units, each of which corresponds to a respective one of the control signals and is activated by said processor unit when the respective one of the control signals is currently selected by said  
10 processor unit; and

a plurality of patterns, each of which is disposed adjacent to a respective one of said lamp units and illustrates a control function associated with the respective one of the control signals.

15 3. The remote controller as claimed in Claim 1, wherein said function display unit includes a liquid crystal display for showing a plurality of function icons thereon, each of said function icons illustrating a control function associated with a respective one of the control  
20 signals.

4. The remote controller as claimed in Claim 3, wherein said function select key enables said processor unit to control said function display unit to highlight one of said function icons corresponding to the currently  
25 selected one of the control signals.

5. The remoter controller as claimed in Claim 3, wherein said function select key enables said processor unit

to control said function display unit to position a cursor on one of said function icons corresponding to the currently selected one of the control signals.

5 6. The remote controller as claimed in Claim 1, wherein said controller circuit further includes an audio output unit connected to and controlled by said processor unit so as to generate an audio output whenever one of the control signals is selected by said processor unit.

10 7. A remote controller capable of transmitting different control signals for controlling an anti-theft device on an automobile, said remote controller comprising:

a casing;

15 a controller circuit disposed in said casing and including a processor unit and a transmitter circuit coupled to and controlled by said processor unit so as to transmit the control signals wirelessly;

a function key set mounted on said casing and coupled to said processor unit; and

20 a function display unit mounted on said casing and coupled to said processor unit;

said function key set including a function select key operable so as to control selection of the control signals by said processor unit, a first command transmit key, and a user-programmable second command transmit key;

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said processor unit being operable in one of

a first command transmission mode, where

operation of said first command transmit key, after operation of said function select key to select one of the control signals and to enable said processor unit to control said function display unit for providing a visual indication corresponding to the selected one of the control signals, further enables said processor unit to control said transmitter circuit for transmitting the selected one of the control signals,

a key programming mode, where operation of said second command transmit key, after operation of said function select key to select one of the control signals and to enable said processor unit to control said function display unit for providing the visual indication corresponding to the selected one of the control signals, further enables said processor unit to assign the selected one of the control signals to said second command transmit key, and

a second command transmission mode, where operation of said second command transmit key without prior operation of said function select key enables said processor unit to control said transmitter circuit for transmitting one of the control signals that is assigned to said second command transmit key.

8. The remote controller as claimed in Claim 7, wherein said function display unit includes:

a plurality of lamp units, each of which corresponds to a respective one of the control signals and is

activated by said processor unit when the respective one of the control signals is currently selected by said processor unit; and

5 a plurality of patterns, each of which is disposed adjacent to a respective one of said lamp units and illustrates a control function associated with the respective one of the control signals.

9. The remote controller as claimed in Claim 7, wherein said function display unit includes a liquid crystal display for showing a plurality of function icons thereon, each of said function icons illustrating a control function associated with a respective one of the control signals.

10. The remote controller as claimed in Claim 9, wherein said function select key enables said processor unit to control said function display unit to highlight one of said function icons corresponding to a currently selected one of the control signals.

11. The remote controller as claimed in Claim 9, wherein said function select key enables said processor unit to control said function display unit to position a cursor on one of said function icons corresponding to a currently selected one of the control signals.

12. The remote controller as claimed in Claim 7, wherein said controller circuit further includes an audio output unit coupled to and controlled by said processor unit so as to generate an audio output whenever one of the

control signals is selected by said processor unit.